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| **Mathematics 5E Lesson Plan** | | | | |
| **Grade Level 3rd** | | **Concept Addition and Subtraction** | **Teacher** | **Date(s)** |
| **Outcomes** | | | | |
| **Content**  *Common Core Standards &Essential Standards* | 3.NBT.2 Fluently add and subtract within 1,000 using a variety of strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. | | | |
| **Big Idea**  *What is the key learning? Why are you doing this?* | 3 digit by 3 digit Addition using place value | | | |
| **Essential Question(s)**  *What question(s) should students be able to answer at the end of the lesson/unit?* | How does place value help me add? | | | |
| **Knowledge**  *What do students need to know to be successful (e.g., formulas, vocabulary, etc.)?* | Addend, sum, place value, digit, ones, tens, hundreds | | | |
| **I Can Statements**  *What should students be able to do independently?* | I can use a variety of strategies to add 3 digit numbers. | | | |
| **Evidence of Learning** | | | | |
| **Assessment**  *A good activity should reflect mastery of the standards and be completed independently.* | Exit Slip – 329 258 105 243 187  + 217 + 171 +165 + 158 +211  \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ | | | |
| **Resources** | | | | |
| **Technology & Resources**  *List the technology and resources being used in the lesson (e.g., text, web sites, video, etc.)* |  | | | |
| **Materials**  *List all materials being used in the lesson* |  | | | |
| **Instructional Plan** | | | | |
| **Number Talk**  *During a number talk, the teacher presents an equation for students to solve mentally or a quick image for students to determine the*  *number of objects. Students compute mentally using a variety of strategies in a short amount of time (to promote fluency). The teacher facilitates discussion by having various students share strategies (teacher may record strategies or students may present/record their own strategies) and asks clarifying question. The teacher facilitates discussion regarding efficiency of strategies presented.*  **Or**  **Math Task**  *A task is a word problem strategically posed to challenge students’ thinking about a concept or skill. Tasks should be used to expose students to unfamiliar, yet appropriate concepts before formal instruction in a meaningful context. Tasks should also be used to revisit concepts during and after formal instruction in order to deepen students’ understanding of that particular concept. Students work independently or in small groups, using paper and pencil to solve, sharing strategies in a discussion facilitated by the teacher.* | *The Scouts are collecting canned food to donate to the Food Bank in their*  *town. Last Saturday, they collected 175 cans. This Saturday, they collected 168*  *cans. How many cans have they collected in all?* | | | |
| **Engage (Whole Group)**   * *Rigorous problem/task that requires reasoning with focus concept(s) for the day* * *Pose a question or conjecture* * *Provide a meaningful context/connection* * *Direct instruction* | Show students these two problems on the board 27+53 and 356+283 and have them discuss at their table what is similar and what is different about the two problems.  Students will share their answers. If not shared, draw their attention to 2 digit vs. 3 digit, both addition and what strategies could be used to solve them. | | | |
| **Explore** **(guided)**   * *Students work through a set of problems or a task focused on skill or concept of the lesson* * *Teacher facilitates small group discussion, holds individual student conferences, asks probing questions to deepen understanding, identifies student strategies that should be shared with the whole group, and makes decisions about next steps for instruction* | Have students solve 348+352, 298+245, 457+233 using their choice of manipulative. They may choose from hundreds board, base ten blocks, pencil/paper, mental math. | | | |
| **Explain** **(whole group)**   * *Teacher facilitates whole class discussion based on guided practice work* * *Students are exposed to various strategies including student-invented algorithms and teacher-introduced strategies (when appropriate)* | Students will share the strategies they used to solve the addition problems.  How did you solve 348+352? What strategy did you use?  How did you solve 298+245 ? What strategy did you use?  How did you solve 457+233? What strategy did you use?  \*Students will show understanding that addition is putting addends together to find the sum which will always be a larger number than you began with.  \*Remind students if you add numbers in the ones place and the digit is larger than 9 you must regroup and adds to the tens amount, also applies to if the tens digit is larger than a 9 it regroups to a hundred.  Ask, “Was there a strategy that you think might not be a good fit for solving 3 digit plus 3 digit numbers?”  Write the problem 327+496 on the board. Ask students what strategy they would use to solve that problem. Discuss that because 7+6 = 13 you must take that extra ten and add it to the 20 + 90 + 10. Also because 20 + 90 + 10=120 you must take that hundred and add it to the hundreds column. (Focusing on the regrouping element not necessarily the expanded form.) | | | |
| **Elaborate** **(independent/small group/whole group)**   * *May be class work or homework* * *Assignment should be revisited to provide student feedback on accuracy of solutions during the class period if class work or the following day if homework* * *Students work independently or in small groups on differentiated sets of problems or tasks to further explore the concept* * *Teacher works with individual students or small groups on intervention strategies or enrichment/extension tasks* | Have students solve 5 problems from a group of 10 problems displayed on the board using the strategy of their choice.  Teacher will circulate and notice difficulties students may be having and making notes for small group instruction. | | | |
| **Evaluate (assessment)**   * *Minute-by-minute assessment throughout the lesson* * *Exit tickets* * *Conferring with students* * *Analysis of students’ notebook* * *Common formative assessments (PLC created)* * *Quizzes* * *Tasks (PLC created, evaluated with a rubric)* * *Student interviews* | Exit Slip – 329 258 105 243 187  + 217 + 171 +165 + 158 +211  \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ | | | |

5E descriptors from Durham Public Schools Elementary Mathematics Blueprint

**Engagement**